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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/595,005	06/16/2000	James Norman Cawse	RD-27,442/USA	2521

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GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER

MAHATAN, CHANNING

ART UNIT PAPER NUMBER

1631

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/595,005

Applicant(s)

CAWSE ET AL.

Examiner

Channing S Mahatan

Art Unit

1631

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 September 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3. ☒ Applicant's reply has overcome the following rejection(s): 35 U.S.C. 112 1<sup>st</sup> Paragraph & 112 2<sup>nd</sup> Paragraph.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.


Claim(s) rejected: 1-12 and 16-21.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

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December

Continuation of 5. does NOT place the application in condition for allowance because: The rejections of claims 1-12 and 16-21 under 35 U.S.C. 103(a) as being unpatentable over Cong et al. taken in view of Brown et al. or Nan et al. taken in view of Brown et al. is maintained for reasons of record. Applicants have submitted arguments directed to Brown et al. stating: 1) Brown et al. does not mention catalytic property, catalytic turnover number, halide, etc. (pages 4-5 of the response); and 2) one of skill in the art would not have been led to "executing a genetic algorithm based on a "catalytic turnover number" to combinatorially select a best catalyst system by a teaching that does not mention catalysis (Brown et al.). Again, Brown et al. teaches the application of the disclosed genetic algorithm method to the optimization of any number of physical or other properties (i.e. catalytic property) of the combinatorial library, wherein having a diversity of compounds is desirable to designing a combinatorial mixture library for lead identification to fully explore the scope of activity against the target (i.e. catalytic turnover number) (page 2304, lines 1-4 on the left column). Furthermore, Brown et al. provides motivation to combine the disclosed genetic algorithm method based on "any physical or other properties of the combinatorial library" in a combinatorial library with either: a) the high-throughput synthesis and screening method of combinatorial heterogeneous catalyst libraries of Cong et al.; or b) the combinatorial library catalyst synthesis method of Nan et al. Additionally, Applicants have indicated that they are unable to identify a teaching of Brown et al. that "indicates the successful application of genetic algorithms to a wide range of problems in both chemical and non-chemical domains". Applicants are directed to page 2305, lines 25-27 on the right column of Brown et al. (it should be noted the citation of this language was indicated in the 'Office Action' mailed 14 April 2004 (see page 8, lines 4-6). Finally, the 'Final Rejection' mailed 10 August 2004 was not premature in view of Applicants' arguments overcoming the rejections under 35 U.S.C. 112 1<sup>st</sup> and 112 2 since the rejections of claims 1-12 and 16-21 under 35 U.S.C. 103(a) are maintained.

  
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1/18/05